

**ABSTRACT OF THE DISLCOSURE**

A data processing system is provided with an instruction (PKH) that combines a packing operation of respective portions of input operand data words ( $R_n$ ,  $R_m$ ) into an output data word ( $R_d$ ) together with the ability to select one of the portions to be combined from a variable position ( $k$ ) within its respective input operand data word in a manner that allows additional processing to be carried out together with the packing operation. The instruction conveniently combines either the top or bottom half of one of the input operand data words with a half data word portion selected from a variable position within the other input operand data word.

[Figure 3]